

Jill Pearce

Education

Ph.D. (Geophysics): November 2005
University of Toronto, Toronto, Canada

M.Sc. (Geophysics): 1999
University of Toronto, Toronto, Canada

B.Sc. (Math and Physics): 1998
University of Toronto, Toronto, Canada

Publications

J. Pearce and Y. Fialko, *Modelling Steady Magmatic Inflation at Uturuncu Volcano, Bolivia* (in preparation)

J. Pearce and Y. Fialko, *Mechanics of active magmatic intraplate in the Rio Grande Rift near Socorro, New Mexico*, JGR-Solid Earth (in press)

J. Pearce and R.C. Bailey, *Density-contrast instabilities in finite-element modelling of slow viscous and viscoelastic flow*, International Journal of Computational Fluid Dynamics, Vol 21, No 2, 2007

J. Pearce and R.C. Bailey, *Are some domes the ghosts of basins?* Geophysical Research Letters, Vol 32, No 18, 2005.

Research Interests

- Investigating crustal deformation due to magmatic processes using InSAR
- Understanding the development and thermal/mechanical evolution of magma chambers and dike intrusions
- Using numerical modelling techniques to study heat flow and viscoelastic deformation in volcanic regions and rift zones

Professional Experience

Caltech Postdoctoral Fellow, Jet Propulsion Laboratory, La Cañada Flintridge, CA: November 2009-present
Geodynamic modelling, Satellite geodesy (InSAR), Planetary science
Advisor: Paul Lundgren

Postdoctoral Fellow, IGPP/Scripps, La Jolla, CA: 2007-2009
Geodynamic modelling, Satellite geodesy (InSAR), volcanology
Advisor: Yuri Fialko

Model Risk Analyst, BMO Bank of Montreal, Toronto, ON: 2006-2007
Validation, testing and benchmarking of financial models for pricing derivatives and estimating risk

Scientific/GUI Programmer, Dept of Physics, University of Toronto: 2005
Metal-detector performance simulation for humanitarian de-mining research
Advisor: Richard Bailey

Awards

Scripps Institution of Oceanography Earth Science Postdoctoral Fellowship: 2007-2008
Ontario Graduate Scholarship in Science and Technology: 2000-2003
Reginald Blyth Fellowship: 2001-2003
Seymour H. Vosko Memorial Prize: 2002-2003
E.F. Burton Fellowship: 1999-2000
University of Toronto Open Scholarship: 1998-1999
Victoria College Chancellor's Scholarship: 1995
Victoria College Dept. of Classics Entrance Scholarship: 1992